

Remarks/Arguments

Applicants have received and carefully reviewed the Final Office Action mailed November 23, 2009. Claims 14-36 remain pending. Claims 14, 17, 18, 21, 22, 26, and 30-34 have been amended. Support for the amendments can be found in the specification, claims, and drawings as originally filed. No new matter has been added. Favorable reconsideration is respectfully requested in light of the following remarks.

Rejections under 35 U.S.C. § 102(b)

Claim 14 was rejected as being anticipated by Gruber (DE 36 04 314). Applicants respectfully traverse the rejection. Independent claim 14, as amended, recites:

14. (Currently Amended) A mixing device for mixing gas and combustion air for a gas burner comprising:

a housing, the housing having a first fastener member configured to receive a gas regulating device, and a second fastener member configured to interface with a supporting plate of a blower; and

a venturi nozzle, wherein the venturi nozzle, the first and the second fastener members are [[is]] integrated in the housing in such a way that the housing, the first and second fastener members and the venturi nozzle are formed as a monolithic unit.

Gruber does not appear to teach the identical structure recited in the claim, and thus cannot be deemed to anticipate claim 14 or the claims dependent thereon. For example, Gruber does not appear to teach a “housing having a first fastener member configured to receive a gas regulating device, and a second fastener member configured to interface with a supporting plate of a blower”, and a venturi nozzle, “wherein the venturi nozzle, the first and the second fastener members are integrated in the housing in such a way that the housing, the first and second fastener members and the venturi nozzle are formed as a monolithic unit”, as recited in claim 14. Gruber thus cannot be deemed to anticipate the claim. Further, there would appear to be no rational reason why one of ordinary skill in the art would be motivated to modify Gruber to achieve the claimed structure. As such, claim 14 is believed to be clearly patentable over Gruber. Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 14, 16, and 26-28 were rejected under 35 U.S.C. §102(b) as being anticipated by DE 197 33 768. Notably, DE 197 33 768 is in German, and the English abstract provides few details of the construction of the device. A machine translation of the specification of DE 197 33

768 does not appear to describe the claimed elements, but did yield the following statement: "The figures of the design show the article according to invention partly strongly schematized and are not necessarily full-scale to be understood." (Column 2, lines 60-63, translated at <http://babelfish.yahoo.com>) Applicants submit that it is improper to infer any specific construction from the "strongly schematized" figures of the reference, if that is where the Examiner believes that feature is taught. Because DE 197 33 768 is not in the English language, Applicants respectfully request that the Examiner obtain a translation of those parts relied upon by the Examiner if the Examiner elects to maintain this rejection.

In any event, DE 197 33 768 does not appear to disclose the identical structure recited in independent claim 14. For example, DE 197 33 768 does not appear to teach a "housing having a first fastener member configured to receive a gas regulating device, and a second fastener member configured to interface with a supporting plate of a blower", and a venturi nozzle, "wherein the venturi nozzle, the first and the second fastener members are integrated in the housing in such a way that the housing, the first and second fastener members and the venturi nozzle are formed as a monolithic unit", as recited in claim 14. DE 197 33 768 thus cannot be deemed to anticipate the claim. Further, there would appear to be no rational reason why one of ordinary skill in the art would be motivated to modify DE 197 33 768 to achieve the claimed structure. As such, claim 14 is believed to be clearly patentable over DE 197 33 768. For similar and other reasons, dependent claim 16 is also believed to be clearly patentable over DE 197 33 768. Reconsideration and withdrawal of the rejection are respectfully requested.

Turning now to independent claim 26, which recites:

26. (Currently Amended) A gas burner, comprising:
a combustion chamber;

a mixing device configured adapted to mix gas and combustion air, the mixing device including a housing with and a venturi nozzle, wherein the venturi nozzle is integrated in the housing in such a way that the housing and the venturi nozzle are formed as a monolithic unit;

a blower having a supporting plate;
wherein the housing includes a fastener member configured to receive the supporting plate of the blower; and

the blower, when activated, acts acting on the mixing device to suck in a mixture of gas and combustion air provided by the mixing device and feeding the mixture to the combustion chamber of the gas burner.

DE 197 33 768 does not appear to teach such a structure. In order to anticipate, the cited reference must disclose each and every claimed element and feature in at least as much detail as is claimed. DE 197 33 768 fails to do so. In addition, and as noted above, Applicants submit that it is improper to infer any specific construction from the “strongly schematized” figures of DE 197 33 768, if that is where the Examiner believes that features are taught. Because DE 197 33 768 is in not in the English language, Applicants respectfully request that the Examiner obtain a translation of those parts relied upon by the Examiner if the Examiner elects to maintain this rejection.

The Examiner may be attempting to argue that the elements of claims 14 and 26 that are missing from DE 197 33 768 are somehow inherent in DE 197 33 768. However, MPEP § 2112 IV makes clear:

The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (reversed rejection because inherency was based on what would result due to optimization of conditions, not what was necessarily present in the prior art); *In re Oelrich*, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981). "To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.' " *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999)...

"In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990).

(Emphasis added). Applicants do not believe it can readily be argued that the claimed features are necessarily present in DE 197 33 768. Nor would there appear to be any reason or motivation to modify DE 197 33 768 to arrive at the devices of claims 14 and 26. For these and other reasons, independent claims 14 and 26 are believed to be clearly patentable over DE 197 33 768. Additionally, there would appear to be no rational reason for one of ordinary skill in the art to modify DE 197 33 768 to achieve the specific structure recited in independent claims 14

and 26, and the claims dependent thereon. Reconsideration and withdrawal of the rejection are respectfully requested.

Rejections under 35 U.S.C. § 103

Claims 20-25, 29, 30, and 32-36 were rejected under 35 U.S.C. §103(a) as being unpatentable over DE 197 33 768 in view of U.S. Patent No. 3,468,298 (Teague, Jr. et al.). After careful consideration, Applicants must respectfully disagree.

Independent claim 14 from which claims 20-25 depend is distinguished above as being clearly patentable over DE 197 33 768. Teague, Jr. et al. do not appear to remedy the noted shortcomings of DE 197 33 768. Thus, claim 14 is believed to be clearly patentable over both references. Claims 20-25 include the elements of independent claim 14, and thus are also believed to be clearly patentable over DE 197 33 768 and Teague, Jr. et al. for at least the same reasons. Claims 20-25 also add significant further distinguishing features.

Independent claim 26 from which claims 29, 30, 32, and 33 depend is distinguished above as being clearly patentable over DE 197 33 768. Teague, Jr. et al. do not appear to remedy the noted shortcomings of DE 197 33 768. Thus, claim 26 is believed to be clearly patentable over both references. Claims 29, 30, 32, and 33 include the elements of independent claim 26, and thus are also believed to be clearly patentable over DE 197 33 768 and Teague, Jr. et al. for at least the same reasons. Claims 29, 30, 32, and 33 also add significant further distinguishing features.

Regarding claims 23 and 33, the Examiner takes Official Notice that it is known to use quick acting securing clip type conduit flow connectors in the gas burner field of endeavour for the purpose of easily and readily securing burner feed means. Applicants respectfully disagree. The claims recite the quick acting clip type connector is part of the monolithic housing. None of the cited references appear to teach or suggest such a structure. Applicants submit that even if clip type conduit flow connectors are known in the gas burner field of endeavour, there is no teaching or suggestion for forming such a connector in a monolithic unit with the housing. Applicants submit the Examiner's taking Official Notice does not provide the necessary teachings in view of the claims as amended. Reconsideration and withdrawal of the rejection are respectfully requested.

Turning now to claim 34, which recites:

34. (Currently Amended) A mixing device for mixing gas and combustion air for a gas burner, said mixing device comprising:

a housing, the housing having side walls that define a venturi nozzle that forms a flow duct, the flow duct having an inlet opening for accepting combustion air and an outlet opening for providing a mixture of gas and combustion air; and

a gas inlet opening extending through a side wall of the housing, the gas inlet opening defining a recess for receiving a gas outlet stub of a gas regulating device; and

wherein the housing includes a fastener member configured to receive the gas outlet stub of the gas regulating device for fastening the housing to the gas outlet stub, wherein the housing, venturi nozzle, gas inlet opening, and fastener member are formed as a monolithic element.

As discussed above, DE 197 33 768 does not appear to teach a housing that defines a venturi nozzle and includes a fastener member configured to receive a gas outlet stub of the gas regulating device for fastening the housing to the gas outlet stub, wherein the housing, venturi nozzle, gas inlet opening, and fastener member are formed as a monolithic element, as recited in claim 34. While FIG. 2 of DE 197 33 768 appears to show an inflow aperture 12 for combustion gas 5, the figures do not appear to show any type of fastening members for a gas outlet stub. Further, because the reference is in German, no further details beyond the abstract can be determined. At best, DE 197 33 768 appear to show a venture tube 11 with a gas inflow tube 12 extending into the venture tube 11. DE 197 33 768 does not, however, appear to disclose any type of housing where the housing includes a fastener member configured to receive the gas outlet stub of the gas regulating device for fastening the housing to the gas outlet stub, wherein the housing, venturi nozzle, gas inlet opening, and fastener member are formed as a monolithic element.

In the Office Action, it was stated that Teague, Jr. et al teaches “a gas regulating device (5) fastened relative to a mixer unit (107,109), the gas regulating device including a gas outlet stub (105) that is insertable into a corresponding recess in the monolithic unit.” Applicants submit that this interpretation does not appear to be substantiated by the actual disclosure of Teague, Jr. et al. The Examiner’s descriptions of the numbered items of Teague, Jr. et al. do not appear to be very accurate (e.g. 5-control housing, 107-annular chamber, 109-radial holes, 105-orifice). Nomenclature aside, Figure 2, which was cited by the Examiner, does not appear to support the Examiner’s interpretation of the various elements. For example, the Examiner identifies 105 as a gas outlet stub (of a gas regulating device) insertable into a corresponding

recess in the monolithic unit. However, claim 34 recites that the gas outlet stub is received by a recess of the gas inlet opening which extends through a side wall of the housing, where the side walls define a venturi nozzle, and the housing includes a fastener member configured to receive the gas outlet stub of the gas regulating device for fastening the housing to the gas outlet stub, wherein the housing, venturi nozzle, gas inlet opening, and fastener member are formed as a monolithic element. Even if 105 were analogous to the claimed gas outlet stub, which it does not appear to be, the (unnamed) wall of Figure 2 into which 105 is threaded does not appear to be one of the (also unnamed) housing walls that define the venturi nozzle (i.e., the walls through which radial holes 109 extend. Rather, the wall (unnamed) of Teague, Jr. et al. that is threaded (105) appears to be separate from the venturi nozzle housing, and in fact, appears to define (in part) an annular chamber 107 that is an antechamber around the venturi nozzle. For these and other reasons, claim 34 is believed to be clearly patentable over the combination of DE 197 33 768 and Teague, Jr. et al.

Claims 15, 17, and 18 were rejected under 35 U.S.C. §103(a) as being unpatentable over DE 197 33 768 in view of U.S. Patent Application Publication No. 2001/0055709 (Sang). After careful consideration, Applicants must respectfully disagree.

Independent claim 14 from which claims 15, 17, and 18 depend, is distinguished above as being clearly patentable over DE 197 33 768. Sang does not appear to remedy the noted shortcomings of DE 197 33 768. Thus, claim 14 is believed to be clearly patentable over both references. Claims 15, 17, and 18 include the elements of independent claim 14 and thus are also believed to be clearly patentable over DE 197 33 768 and Sang for at least the same reasons. Claims 15, 17, and 18 also add significant further distinguishing features.

Applicants further note that while Sang may, as background, disclose that laval or venturi nozzles may be made of plastic, it does not necessarily appear to teach making monolithic nozzles of plastic. Furthermore, the teachings of Sang appear to focus on flow bodies made up of at least a first and a second segment (Abstract), which would appear to teach away from a monolithic construction.

Claims 19 and 31 were rejected under 35 U.S.C. §103(a) as being unpatentable over DE 197 33 768 in view of Sang or Teague, Jr. et al, respectively, as applied to claims 18 and 29, respectively, and further in view of GB 1397536. After careful consideration, Applicants must respectfully disagree.

Application Serial No. 10/597,927
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Independent claim 14, from which claim 19 depends, is distinguished above as being clearly patentable over DE 197 33 768. As noted above, Sang does not appear to remedy the noted shortcomings of DE 197 33 768, nor does GB 1397536. Thus, claim 14 is believed to be clearly patentable over all three references. Claim 19 includes the elements of independent claim 14, and thus is also believed to be clearly patentable over DE 197 33 768, Sang, and GB 1397536 for at least the same reasons. Claim 19 also adds significant further distinguishing features.

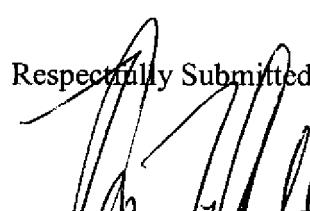
Independent claim 26 from which claim 31 depends is distinguished above as being clearly patentable over DE 197 33 768. As noted above, Teague, Jr. et al. do not appear to remedy the noted shortcomings of DE 197 33 768, nor does GB 1397536. Thus, claim 26 is believed to be clearly patentable over the three references. Claim 31 includes the elements of independent claim 26 and thus is also believed to be clearly patentable over DE 197 33 768, Teague, Jr. et al., and GB 1397536 for at least the same reasons. Claim 31 also adds significant further distinguishing features.

Conclusion

In view of the foregoing, all pending claims 14-36 are believed to be in condition for allowance. Reexamination and reconsideration are respectfully requested. If a telephone conference might be of assistance, the Examiner is encouraged to contact the undersigned attorney at (612) 359-9348.

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Respectfully Submitted,



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